

Maintenance Mechanic

Knowledge, Skills, Abilities, and Personal Characteristics Statements

1	Knowledge of construction process and methods used in the fabrication, maintenance and repair of structures (e.g., furniture, cabinets, wood and steel framing, concrete work, roofing) and fixtures to accomplish work assignments, and to provide direction/information and training.
2	Knowledge of construction materials (e.g., grades and types of lumber, piping, design mix of concrete, shingles, weather proofing) used in the maintenance and repair of structures and fixtures (e.g., concrete, wood and metal framework, roofing, woodworking) to accomplish work assignments and to provide direction/information and training.
3	Knowledge of general construction practices and procedures involved in the maintenance and repair of building structures and fixtures.
4	Knowledge of structural hardware and seismic hold downs to secure structures in compliance with building codes.
5	Knowledge of Title 24 of the Americans with Disability Act (ADA) to ensure building structures are in compliance.
6	Ability to construct, alter, repair or remodel items (e.g., walls, doors, windows, furniture, cabinets) according to blue prints, work orders, and sketches.
7	Ability to measure and mark for alterations (e.g., cutting, fastening) using a variety of tools (e.g., measuring tape, level).
8	Ability to perform rough carpentry (e.g., concrete, wood and metal framework, roofing) using hand and power carpentry tools to accomplish work assignments.
9	Ability to perform finish carpentry (e.g., cabinetry, mill work, furniture, woodworking) using hand and power carpentry tools to accomplish work assignments.
10	Knowledge of the principles, methods, tools, and equipment used in plumbing to ensure adherence to departmental quality standards and the Uniform Plumbing Code.
11	Knowledge of the processes for conducting inspections of standard plumbing installations concerned with various applications (e.g., water, gas, sewage) to ensure proper function, safety, and maximum efficiency.
12	Knowledge of various types of pipe (e.g., galvanized, copper, plastic) and their uses/properties in order to properly plan, conform to the Uniform Plumbing Code, and complete plumbing projects.
13	Knowledge of plumbing design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

14	Ability to solder, silver braze, weld, thread pipe and install copper fittings into copper lines in compliance with the Uniform Plumbing Code, safety requirements, and departmental guidelines.
15	Ability to repair and/or install building plumbing fixtures (e.g., shower valves, urinals, faucets, water closets, water heaters) to complete projects and ensure facilities function properly.
16	Knowledge of the principles and methods (e.g., conduit bending, wire pulling, rating of equipment) used in the maintenance and repair of electrical systems and components (e.g., wiring, switches, lighting, transformers, high voltage, switchboards, motor control centers) to accomplish work assignments.
17	Knowledge of materials, tools, and equipment (e.g., cable reels, conduit benders, stripping tools, voltage or current meters, wire or cable cutters) used in the installation, maintenance, and repair of electrical systems and components (e.g., wiring, switches, lighting, transformers, high voltage, switchboard, motor control centers) to accomplish work assignments.
18	Ability to repair electrical systems and components (e.g., wiring, switches, lighting, transformers, switchboards, motor control centers) to accomplish work assignments.
19	Ability to troubleshoot electrical systems and components to ensure the safe and proper operation and adherence to electrical and building codes.
20	Ability to identify and distinguish different phases (e.g., single, multiple phase) to complete electrical work and ensure properly functioning systems.
21	Ability to identify the correct motor types (e.g., voltage, amperage, revolutions per minute [RPM], frame) to ensure compatibility with the motor to be replaced.
22	Knowledge of components of heating, ventilation, and air conditioning (HVAC) equipment (e.g., refrigerant, compressor, condenser coil, expansion valve, evaporator coil) to assess HVAC operation and repair malfunctioning systems.
23	Knowledge of tools (e.g., drill driver, table saws, band saw, welding machines) used in the fabrication, maintenance and repair of structures and fixtures (e.g., concrete, tile, wood and metal framework, roofing, woodworking) to accomplish a work assignment, and to provide direction/information and training.
24	Knowledge of construction equipment (e.g., forklift, scissor lifts, compressors, generator) used in the maintenance and repair of structures and fixtures to accomplish work assignments, and to provide direction/information, and training.
25	Knowledge of the functions of meters, gauges, and pressure indicators to ensure building systems are functioning properly.
26	Knowledge of manual hand tools used in the completion of electrical, plumbing, mechanical and construction work.

27	Knowledge of drain or pipe clearing/cleaning equipment (e.g., sewer auger machine, hand spinners, handheld electric snake, toilet augers) to facilitate plumbing activities.
28	Ability to use hand tools (e.g., hammer, pry bar, chisels, handsaw) and power tools (e.g., skill saw, electric drill, rotor hammer) used in the fabrication, maintenance and repair of structures and fixtures to accomplish work assignments.
29	Ability to use pneumatic tools (e.g., nail gun, finish gun, palm nailer, jackhammer) used in the fabrication, maintenance and repair of structures and fixtures to accomplish work assignments and to provide direction/information and training.
30	Ability to read and monitor meters, gauges, and pressure indicators to determine whether a machine is working properly.
31	Ability to use ladders, scaffolds, and man lifts in the maintenance, alteration, and repair of facility systems.
32	Ability to clean work areas, machines, equipment, and tools to maintain proper working conditions and foster a clean and safe job site.
33	Ability to operate communications equipment (e.g., two-way radios, mobile cell phones) to communicate with management, departmental contacts, and others.
34	Ability to work independently on projects or assignments without close supervision or detailed instructions to maximize workplace productivity.
35	Ability to demonstrate flexibility in adapting to changes in priorities, work assignments, work conditions and other interactions that may impact pre-established courses of action for completing projects and assignments.
36	Ability to identify information, materials, and resources needed to complete a project or assignment.
37	Ability to work on multiple tasks or parts of tasks simultaneously to ensure timely completion of projects and other work activities.
38	Ability to inspect structures and fixtures to determine needed repairs or improvements.
39	Knowledge of Personal Protective Equipment (PPE) to safely complete work assignments.
40	Knowledge of safe and responsible operation, maintenance, and organization required for tools and equipment used in carpentry, plumbing, mechanical and electrical work to protect self and others in the work place.
41	Knowledge of appropriate times to replace or repair equipment or tools as needed.
42	Knowledge of organizational policies and procedures to maintain safety and security of facilities/departments, staff, and property.
43	Knowledge of safe lifting and handling procedures when transporting building materials, tools, and other items used at project work sites to avoid injuries and comply with safe handling procedures.

44	Ability to read Material Safety Data Sheets (MSDS) to properly handle, store and dispose of materials.
45	Ability to recognize and take effective actions when unsafe or defective construction and/or building conditions exist to ensure the safe and proper operation of the facility.
46	Ability to appropriately respond to facility emergency situations to ensure prompt and appropriate care is administered and safety is maintained.
47	Ability to practice safety and vigilance in the identification of safety or security hazards to actively support a safe and hazard free work environment.
48	Knowledge of the structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar to facilitate interactions with various entities (e.g., staff, the public, contractors, vendors).
49	Ability to read and understand information and ideas presented in writing (e.g., reports, blueprints, specifications, building codes, zoning regulations) to determine work efforts necessary to complete work as designed.
50	Ability to communicate information clearly and concisely, in writing, to supervisor or departmental management to accomplish work assignments.
51	Ability to maintain records and reports (e.g., timesheets, daily work orders, time reports) to provide information and documentation and to comply with departmental policies.
52	Ability to orally communicate with individuals or groups (e.g., supervisors, coworkers, subordinates, the public, vendors) to provide accurate information, instruction, direction, and maintain effective working relationships.
53	Ability to listen and follow oral directions to carry out assigned tasks according to directions by management.
54	Knowledge of basic mathematical operations and calculations (e.g., addition, subtraction, multiplication, division) to complete work assignments.
55	Ability to perform basic mathematical computations (e.g., addition, subtraction, multiplication, division, ratios) to complete work assignments.
56	Ability to perform physical activities that require considerable use of limbs and body parts, such as climbing, crawling, lifting, balancing, walking, stooping, and handling of materials.
57	Ability to grasp, manipulate, or assemble objects used in the installation, maintenance, alteration and repair of building/facility systems.
58	Ability to lift and carry up to 50 lbs. used in the installation, maintenance, alteration, and repair of building/facility systems.
59	Ability to stand and perform work duties for an extended period of time in the installation, maintenance, alteration, and repair of building/facility systems.

60	Ability to work in various temperatures (e.g., warm, hot, cold, freezing) to complete job tasks.
61	Ability to work in an environment that includes dust and other debris using Personal Protective Equipment (PPE) in the installation, maintenance, alteration and repair of building/facility systems.
62	Ability to work in confined spaces as defined by the Occupational Safety and Health Administration (OSHA) to complete job tasks.
63	Ability to work in various outdoor environments (e.g., sun, rain, wind, heat, cold) for extended periods of time to complete job tasks.
64	Ability to develop constructive and cooperative working relationships with diverse groups (e.g., employees, public) and maintain them over time to create a productive environment.
65	Ability to communicate with diplomacy and tact, especially concerning difficult and sensitive issues when dealing with the needs, problems and/or concerns of others.
66	Ability to conduct work in a professional and ethical manner consistent with departmental rules and accepted industry standards.